

- l) lysine; and

- m) ornithine,

wherein NH-X²-C=O is a D- or L-amino acid selected from the group consisting of

- a) alanine;

- b) valine;

- c) leucine;

- d) isoleucine;

- e) norleucine;

- f) serine;

- g) threonine;

- h) tyrosine;

- i) proline;

- j) citrulline;

- k) arginine;

- 1) lysine;

- m) ornithine;

- n) histidine;

- o) glutamic acid;

- p) aspartic acid;

- q) tryptophan;

- r) cyclohexylalanine; and

- s) cyclohexylglycine,

wherein NH-X³-C=O is an amino acid selected from the group consisting of

- a) L-cyclohexylalanine;

- b) D-cyclohexylalanine;

- c) L-cyclohexylglycine; and

- d) D-cyclohexylglycine,

wherein NH-X⁴-C=O is an amino acid selected from the group consisting of

- a) L-proline;

- b) D-proline;

c) L-azetidine-2-carboxylic acid; and

d) D-azetidine-2-carboxylic acid,

wherein $\text{NH-X}^5\text{-C=O}$ is an amino acid selected from the group consisting of

a) L-tyrosine;

b) D-tyrosine;

c) L-phenylalanine; and

d) D-phenylalanine,

wherein $\text{NH-X}^6\text{-C=O}$ is an amino acid selected from the group consisting of

a) L-arginine;

b) D-arginine;

c) L-lysine;

d) D-lysine;

e) L-ornithine;

f) D-ornithine;

g) L-homoarginine; and

h) D-homoarginine,

wherein Y^2 is either

a) an OH group of the C-terminal amino acid having a terminal carboxylic acid group or

b) an amino group where the carboxylic acid group in the C-terminal amino acid is replaced by an amide group or

c) a hydrogen where the carboxylic acid group in the C-terminal amino acid is replaced by an aldehyde group or

d) 7-amido-4-methylcoumarin combined through the carboxylic acid group or

e) para-nitroanilide combined through the carboxylic acid group or

f) is replaced by a connecting chain containing 1 to 35 atoms,

or wherein the compound is a molecule shortened at the C-terminus and/or at the N-terminus by one amino acid, and pharmaceutically acceptable salts thereof.

178. (New) A pharmaceutical composition comprising an effective thrombus-preventing amount of a compound according to claim 177 and a pharmaceutically acceptable carrier.

179. (New) A medication, comprising the pharmaceutical composition according to claim 178 and a component selected from the group consisting of conventional carriers, auxiliaries, additives, and combinations thereof.
180. (New) A diagnostic composition, comprising one or more compounds according to claim 177.
181. (New) A method for thrombin inhibition in human and animals, which method comprises administering an effective amount of a compound according to claim 177.